c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof; and

d) a nucleic acid molecule which encodes a fragment of a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement, wherein the fragment comprises at least 200 consecutive amino acid residues of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by the cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement.

3. (Amended) The nucleic acid molecule of claim 1, further comprising a vector nucleic acid sequence.

4. (Amended) The nucleic acid molecule of claim 1, further comprising a nucleic acid sequence encoding a heterologous polypeptide.

Please add claims 24-40 as follows.

-- 24. The isolated nucleic acid molecule of claim 1, having a nucleotide sequence which is at least 90% identical to the nucleotide sequence of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof.

25. The isolated nucleic acid molecule of claim 24, having a nucleotide sequence which is at least 98% identical to the nucleotide sequence of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof.

26. The isolated nucleic acid molecule of claim 24, having a nucleotide sequence at least 98% identical to SEQ ID NO: 59 operably linked within a recombinant expression vector.

Sub B4

27. The isolated nucleic acid molecule of claim 24, having a nucleotide sequence identical to the nucleotide sequence of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof.

28. The isolated nucleic acid molecule of claim 24, having a nucleotide sequence identical to either of SEQ ID NOs: 59 and 60 operably linked with a recombinant expression vector.

Sub B5

29. The isolated nucleic acid molecule of claim 1, comprising at least 400 nucleotide residues and having a nucleotide sequence identical to at least 400 consecutive nucleotide residues of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof.

30. The isolated nucleic acid molecule of claim 29, comprising at least 650 nucleotide residues and having a nucleotide sequence identical to at least 650 consecutive nucleotide residues of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof.

31. The isolated nucleic acid molecule of claim 29, having a nucleotide sequence identical to at least 650 consecutive nucleotide residues of SEQ ID NO: 59 operably linked within a recombinant expression vector.

32. The isolated nucleic acid molecule of claim 1, which encodes a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the

amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151 or a complement thereof.

33. The isolated nucleic acid molecule of claim 32, operably linked within an expression vector.

34. The isolated nucleic acid molecule of claim 1, which encodes a fragment of a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement, wherein the fragment comprises at least 200 consecutive amino acid residues of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by the cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement.

A3 cont'd Sub B7

35. The isolated nucleic acid molecule of claim 34, which encodes a fragment of a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement, wherein the fragment comprises at least 200 consecutive amino acid residues of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by the cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement.

36. The isolated nucleic acid molecule of claim 34, wherein the fragment comprises at least 200 consecutive amino acid residues of SEQ ID NO: 63.

37. An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule having a nucleotide sequence which is at least 90% identical to the nucleotide sequence of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof;

b) a nucleic acid molecule comprising at least 400 nucleotide residues and having a nucleotide sequence identical to at least 400 consecutive nucleotide residues of any one of SEQ ID NO: 59, SEQ ID NO: 60, and the nucleotide sequence of a cDNA clone deposited with ATCC® as Accession number PTA-151, or a complement thereof;

c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151 or a complement thereof; and

d) a nucleic acid molecule which encodes a fragment of a polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by a cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement, wherein the fragment comprises at least 200 consecutive amino acid residues of any one of SEQ ID NO: 61, SEQ ID NO: 63, and the amino acid sequence encoded by the cDNA clone deposited with ATCC® as Accession number PTA-151 or its complement,

wherein the nucleic acid molecule encodes a polypeptide that exhibits a property selected from the group consisting of

i) ability to bind with hyaluronic acid;
ii) ability to modulate human brain tissue organization;
iii) ability to modulate interaction of human brain cells with brain extracellular matrix;
iv) ability to modulate movement of human brain cells through brain extracellular matrix;
v) ability to modulate growth of human brain cells;
vi) ability to modulate proliferation of human brain cells;
vii) ability to modulate differentiation of human brain cells;
viii) ability to modulate adhesion between human brain cells; and
ix) ability to modulate formation of neurological connections between human brain cells.

38. The isolated nucleic acid molecule of claim 37, wherein the property is selected from the group consisting of iii) to ix) and wherein the human brain cells are glial cells.

39. The isolated nucleic acid molecule of claim 38, wherein the glial cells are cells of a glioma.

40. The isolated nucleic acid molecule of claim 39, wherein the glioma is selected from the group consisting of an astrocytoma, an endophytic retinoblastoma, an exophytic retinoblastoma, an ependymoma, a ganglioglioma, a nasal glioma, an optic glioma, a Schwannoma, and a mixed glioma. --

REMARKS

Claims 1, 3-7, 16-18, and 24-40 are pending. Claims 2, 8-15 and 19-23 have been canceled without prejudice. Claims 1, 3, and 4 have been amended. Claims 24-40 have been added. For the Examiner's convenience, the Applicants have enclosed a "**Clean Copy of Claims Following Entry of Amendments in Response to Restriction Requirement and Preliminary Amendment**", in which the claims, as amended, are listed in an order which the Applicants suggest would be appropriate for issuance.

Support in the Specification

Claim 1 has been amended to delete reference to subject matter that was not elected in response to the Restriction Requirement issued by the Examiner in Paper No. 7. Recitations of percent identity and numbers of residues are supported in the specification, for example at page 2, line 28, through page 4, line 2.

Merely formal changes have been made to the language of claims 3 and 4, and these claims are supported by claims 3 and 4 as originally filed and throughout the specification.

Newly added claims 24-36 recite discrete portions of the subject matter recited in claim 1, and are supported in the specification by claim 1, as originally filed and as indicated above for the amendments made to claim 1. Recitation of recombinant expression vectors can be found in the specification, for example at page 136, line 14, through page 137, line 5.

The phenomena and cell types recited in newly added claims 37-40 are disclosed in the specification, for example at page 101, line 26, through page 103, line 6.

For the foregoing reasons, the Applicants respectfully contend that the amendments and additions made herein do not include new matter.

Summary

The Applicants respectfully contend that the pending claims are in condition for allowance. An early and favorable office action on the merits is requested.

Respectfully submitted,

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31 October 2001
(Date)

By: _____

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